

STATE OF VERMONT
PUBLIC SERVICE BOARD

DOCKET NO. 7032

Joint Petition of Vermont Electric Power
Company Inc. (VELCO), Green Mountain)
Power Corporation (GMP) and Town of Stowe)
Electric Department (Stowe) for a certificate of)
Public Good, pursuant to 30 V.S.A. Section)
248, authorizing VELCO to construct the so-)
called Lamoille County Project)

PREFILED DIRECT TESTIMONY
OF
DAVID RAPHAEL

ON BEHALF OF THE
VERMONT DEPARTMENT OF PUBLIC SERVICE

April 11, 2005

Summary: Mr. Raphael's testimony addresses whether the Lamoille County Project, as currently proposed, will have undue adverse effect on aesthetics and scenic beauty.

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1 **Q. Please state your name and occupation.**

2 A. My name is David Raphael and I am a Professional Landscape Architect and
3 Planner as well as a Lecturer in the School of Natural Resources at the University
4 of Vermont.

5

6 **Q. Please briefly describe the purpose of your testimony.**

7 A. The purpose of my testimony is to present the conclusions reached in analyzing
8 the potential aesthetic impacts of the Vermont Electric Power Company's
9 (VELCO) proposed Lamoille County Project 115kV upgrade which is before the
10 Vermont Public Service Board in Docket 7032. I was retained to perform such an
11 analysis by the Vermont Department of Public Service.

12

13 **Q. Please summarize your qualifications.**

14 A. I began my career as landscape architect and planner working for the State of
15 Massachusetts Department of Environmental Management. Since 1986 I have
16 been the Principal and owner of LandWorks, a multidisciplinary planning, design
17 and communications firm based in Middlebury, Vermont. LandWorks serves both
18 public and private sector clients in Vermont and the Northeast. Our areas of
19 expertise include visual, aesthetic and environmental assessment, site and master
20 planning, graphic communications and GIS mapping, permit planning,
21 participatory and community planning, downtown revitalization, open space and
22 conservation planning, zoning ordinance and design review development,
23 landscape architecture and environmental design. At LandWorks we have worked
24 as advocates for communities, appellants, the State of Vermont and private
25 corporations. I personally have presented and served as an expert witness before

1 most of the District Commissions in the State and the Environmental Board, as
2 well as the Public Service Board.

3
4 LandWorks has extensive experience with regard to visual assessment and
5 environmental impact, Criterion 8 of Act 250, and the design and installation of
6 utility facilities and towers. We have been consultants in this capacity for the
7 Vermont Department of Public Service. We have evaluated the aesthetic and
8 environmental impact of transmission lines and corridors (throughout the state of
9 Vermont); transmission towers (throughout the state of Vermont and the PV20
10 line removal along the Route 2 causeway in Milton/South Hero); proposed
11 telecommunication facilities (Coy Mountain tower proposal) and windpower
12 turbines (Searsburg project developed by Green Mountain Power Corp.). We have
13 prepared feasibility studies for windpower siting for the Lamoille County
14 Development Commission. I have served as a member of the Design Issues Study
15 Committee appointed by the Secretary of the Agency of Natural Resources, an
16 initiative which clarified the application of the Quechee Analysis for aesthetics
17 and which resulted in the publication of *Vermont's Scenic Landscapes: A Guide*
18 *for Growth and Protection*. In addition we have prepared zoning ordinances
19 based on scenery preservation and environmental protection guidelines (Town of
20 Stowe Scenic Hillside and Overlay District), prepared scenic highway corridor
21 studies (Interstate 91 in Brattleboro) and authored a study and state policy which
22 was adopted for permit review of the night lighting of ski areas (Agency of
23 Natural Resources). In addition we were recently involved with the VELCO
24 Northwest Reliability Project Docket No. 6860. We worked as consultants for the
25 Vermont Department of Public Service to develop testimony, exhibits and post-
26 certification documents.

27
28 **Q. Please briefly describe the process you undertook to analyze the**
29 **proposed project.**

30 **A.** Our methodology for this project included visual and cartographic analysis,
31 research and review. Our primary analyses assesses the project's visibility and
32 potential for visual and aesthetic impacts, with a focus on viewsheds from major
33 federal, state or local roads, relationships to nearby areas of public interest, high
34 scenic value and/or official designation as a cultural, aesthetic or recreational

1 facility or resource, road crossings and locations that involve individual
2 residences or residential areas. We have used on site and field study to reinforce
3 our analysis and findings. The technical expertise of the Department of Public
4 Service and their consultants has also provided guidance for our work. We have
5 used the documents and exhibits provided/submitted by VELCO, including but
6 not limited to the Direct Testimony and the Exhibits of VELCO on Direct
7 Volumes I, II and III. Finally, our report states our overall conclusions with regard
8 to the aesthetic impacts of this project under the so-called Quechee Decision, as
9 developed by the Vermont Environmental Board for aesthetic analysis and
10 conclusions.

11
12 **Q. Is your report attached?**

13 **A.** Yes it is, as Exhibit DPS-DR-1, and Exhibits DPS-DR-2 through DPS-DR-17.
14 Note that the mileage numbering in this report follows T.J. Boyle & Associates
15 numbering convention, which differs from that of Ryan Johnson, with Mile 0.0 at
16 the Proposed Duxbury Switching Station.

17
18 **Q: Does this conclude your testimony?**

19 **A:** Yes.